

# **Range Telephone Cooperative, Inc. - Wyoming**

## **5 Year Service Quality Improvement Plan**

### **2016 Update & Progress Report**

#### **Introduction**

Range Telephone Cooperative, Inc. is an ETC serving 2 study areas, one in Montana and one in Wyoming. The Wyoming study area is 3,434 square miles in northeastern Wyoming served by 6 wire centers with 1,917 current access lines. Range has the following wire centers:

| <u>Wire Center</u> | <u>Sq. Miles</u> | <u>Access Lines</u> |
|--------------------|------------------|---------------------|
| Alzada             | 151              | 24                  |
| Arvada             | 1,277            | 175                 |
| Clearmont          | 693              | 147                 |
| Decker             | 266              | 123                 |
| SE Sheridan        | 341              | 307                 |
| Sundance           | 706              | 1,141               |
| Total              | 3,434            | 1,917               |

#### **Current USAC Information**

Per the Universal Service Administrative Company (USAC) Range Telephone Cooperative, Wyoming received a total of \$791,126 in USF support funds year to date 05.31.2016. The breakdown of the funding to time of filing is:

|                |                  |
|----------------|------------------|
| High Cost Loop | \$ 301,472       |
| ICLS           | \$ 397,489       |
| CAF ICC        | \$ <u>92,165</u> |
|                | \$ 791,126       |

These Universal Service Funds (USF) are used to maintain, upgrade and improve the Range Telephone network, and to cover operating expenses and debt commitments as necessary to continue offering affordable voice and broadband services within its authorized serving areas.

USF will continue to be included in Range Telephones current revenue accounts and forward-looking projections. Total Revenues are used for both capital expenditures as well as covering operating expenses and fixed costs incurred in obtaining capital from lenders. Range Telephone does not segregate USF separately for purposes of capital and operating expenditures. USF is expended in the same proportion as all other revenues.

The proportionate share of USF expenditures year to date 2016 allocated for CAPEX is estimated to be \$270,944 or 34%, and for OPEX is estimated to be \$520,182 or 66%.

(Note: A greater share of USF is spent on CAPEX during the 2<sup>nd</sup> half of a given year when Range's traditional construction season begins in mid-May and ends by November)

This 5 year improvement plan is a section of the Company's 2015 Annual Report. It is in compliance with # 54.313(a)(1) adopted in the FCC USF/ICC Transformation Order (11-161). Range has developed its improvement plan, concentrating on the delivery and continuation of a robust network which provides, at a minimum, the federally required voice and broadband connectivity as stipulated by regulatory rule.

Range advises that this improvement plan has been carefully crafted, matching measured network deployment, improvement and quality service levels with known financial implications of the Transformation Order upon the Companies cash flows. This would include the Company's ability to borrow needed funds. The uncertainty of such cash flows being received in the outer years as a result of current and potential regulatory action on rate of return carriers has resulted in the Company taking a balanced yet realistic approach.

Range will reevaluate this plan on an annual basis. Action, however, may also be taken abruptly on the presented plan for both current and outer years in the event of evolving regulatory conditions, changes in technology or vendor support, or available financing. All adjustments to the improvement plan in this document will be reflected and explained in subsequent annual reports.

Range has developed its improvement plan, concentrating on the delivery and continuation of a robust network which provides, at a minimum, the federally required voice and broadband connectivity as stipulated by regulatory rule.

## **5 Year Service Quality Improvement Plan by Year**

For the next 5 years Range will deploy Broadband Loop Carrier (BLC) equipment to support increased bandwidth to its end users and to collapse its legacy circuit switched voice network into its next generation packet switched voice network. The majority of this Plan entails replacing traditional copper T-carrier facilities with Fiber to The Node (FTTN) infrastructure in support of the new BLC being deployed. In an effort to minimize retained copper loop lengths, additional BLC nodes will be designed for installation either during initial placement of the FTTN facilities or in a subsequent Plan year. Fixed wireless will also be considered where such technology may be more economically feasible to meet the same objective. As this Plan is implemented all subscribers falling within the definition of 'reasonable request' will have access to broadband service at speeds defined by the FCC.

### **Plan Year 2015**

#### **SE SHERIDAN EXCHANGE - WYOMING**

#### **HARDESTY FIBER TO THE NODE CONSTRUCTION - HRDY**

The Hardesty Fiber Project includes the placement of approximately 6.18 route miles of fiber optic infrastructure. This new infrastructure will replace copper T-Carrier span lines currently used to trunk Digital Loop Carrier (DLC) facilities in this area. Direct buried cable placement method is planned for this project. The Hardesty Electronic Serving Area Interface (ESAI) connects sixteen (16) premises in a nineteen (19) square mile area. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

**2015 Update: This project is under construction.**

**2016 Update: This project was completed 4 QTR 2015.**

#### **SE SHERIDAN EXCHANGE - WYOMING**

#### **CAT CREEK FIBER TO THE NODE CONSTRUCTION - CTCK**

The Cat Creek Fiber Project includes new placement of approximately 9.32 route miles of fiber optic infrastructure. This new infrastructure will replace copper T-Carrier span lines currently used to trunk Digital Loop Carrier (DLC) facilities in this area. Direct buried cable placement method is planned for this project. The Cat Creek Electronic Serving Area Interface (ESAI) connects twenty one (21) premises in a twenty eight (28) square mile area. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

**2015 Update: This project is under construction.**

**2016 Update: This project was completed 4 QTR 2015.**

#### **SE SHERIDAN EXCHANGE - WYOMING**

#### **CENTRAL OFFICE AND ACCESS CARRIER SITE UPGRADES - SESN**

This project includes the installation of new Broadband Loop Carrier (BLC) electronics in the Southeast Sheridan Central Office and subtending remote electronics sites. This project will not

only support increased broadband capability within the Southeast Sheridan exchange but will also allow for the collapse of a legacy DMS-10 circuit switch into the recently placed Metaswitch packet switch in 2015. In addition to the new BLC electronics, wireless point-to-point transport facilities will be placed to upgrade the copper T-Carrier span lines to several remote electronic sites. Existing last mile copper facilities will be retained for the delivery of voice and broadband services to one hundred and seventy six (176) connected premises in a geographic area covering over two hundred and three hundred and forty one (341) square miles. Current broadband speeds average 3Mbps downstream and 512Kbps upstream. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the **2015 calendar year.** **2015 Update:** This project is in progress.

**2016 Update:** This project was completed 4 QTR 2015.

#### **DECKER EXCHANGE – WYOMING**

#### **ASH CREEK FIBER TO THE NODE CONSTRUCTION - ASHC**

The Wyoming section of the Decker to Ash Creek Fiber Project includes new placement of approximately 11.57 route miles of fiber optic infrastructure in Wyoming. This new infrastructure will replace copper T-Carrier span lines currently used to trunk Digital Loop Carrier (DLC) facilities in this area. Direct buried cable placement method is planned for this project. The Ash Creek Electronic Serving Area Interface (ESAI) is located in Montana but connects fourteen (14) Wyoming premises in a thirty (30) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) 518-(TBA) loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

**2015 Update:** This project is under construction.

**2016 Update:** This project was completed 4 QTR 2015.

#### **DECKER EXCHANGE – WYOMING**

#### **CENTRAL OFFICE AND REMOTE BROADBAND LOOP CARRIER UPGRADES - DCKR**

This project includes the installation of new Broadband Loop Carrier (BLC) electronics in the Decker, MT Central Office and subtending remote electronics sites to serve Wyoming connected premises. This project will not only support increased broadband capability within the Decker exchange area but will also allow for the collapse of a legacy DMS-10 circuit switch into the recently placed Metaswitch packet switch in 2015. Current copper plant service delivery to the subscribers will be retained. The Decker Central Office serves ninety three (93) Wyoming premises in a two hundred and sixty six (266) square mile area. Current broadband speeds average 3Mbps downstream and 512Kbps upstream. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

**2015 Update:** This project is in progress.

**2016 Update:** Completed

## **ARVADA EXCHANGE - WYOMING**

### **NORTH POWDER RIVER FIBER TO THE NODE CONSTRUCTION - NPWR**

This project includes new placement of approximately 17.4 route miles of fiber optic infrastructure. This new infrastructure will replace copper T-Carrier span lines currently used to trunk Digital Loop Carrier (DLC) facilities in this area. Direct buried cable placement method is planned for this project. The North Powder River Electronic Serving Area Interface (ESAI) connects nine (9) premises in a seventeen (17) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

**2015 Update: This project is under construction.**

**2016 Update: This project was completed 4 QTR 2015.**

## **ARVADA EXCHANGE – WYOMING**

### **CENTRAL OFFICE AND REMOTE BROADBAND LOOP CARRIER UPGRADES - ARVD**

This project includes the installation of new Broadband Loop Carrier (BLC) electronics in the Arvada, WY Central Office and subtending remote electronics sites. This project will not only support increased broadband capability within the Arvada exchange area but will also allow for the collapse of a legacy DMS-10 circuit switch into the recently placed Metaswitch packet switch in 2015. Current copper plant service delivery to the subscribers will be retained. The Arvada Central Office serves ninety four (94) connected premises in a one thousand two hundred and seventy seven (1,277) square mile area. Current broadband speeds average 3Mbps downstream and 512Kbps upstream. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

**2015 Update: This project is in progress.**

**2016 Update: This project was completed 4 QTR 2015.**

## **ARVADA EXCHANGE – WYOMING**

### **ARVADA CENTRAL OFFICE GENERATOR UPGRADE - ARVD**

The project includes installation of a new emergency standby power generator to assure reliable delivery of broadband and voice services in the event of a commercial power failure. The existing generator at this site is near end of life. This site serves ninety four (94) connected premises in a one thousand two hundred and seventy seven (1,277) square mile area. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Expected completion of this project is within the 2015 calendar year.

**2015 Update: Ongoing**

**2016 Update: This project was completed 4 QTR 2015.**

## **CLEARMONT EXCHANGE – WYOMING**

### **CENTRAL OFFICE AND REMOTE BROADBAND LOOP CARRIER UPGRADES - CLRM**

This project includes the installation of new Broadband Loop Carrier (BLC) electronics in the Clearmont, WY Central Office and subtending remote electronics sites. This project will not only support increased broadband capability within the Clearmont exchange area but will also

allow for the collapse of a legacy DMS-10 circuit switch into the recently placed Metaswitch packet switch in 2015. Current copper plant service delivery to the subscribers will be retained. The Clearmont Central Office serves eighty nine (89) connected premises in a six hundred and thirty eight (638) square mile area. Current broadband speeds average 3Mbps downstream and 512Kbps upstream. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

**2015 Update: This project is in progress.**

**2016 Update: This project was completed 4 QTR 2015.**

#### **CLEARMONT EXCHANGE – WYOMING**

#### **CRAZY WOMAN 1 GENERATOR ADDITION – CW1**

The project includes installation of a new emergency standby power generator to assure reliable delivery of broadband and voice services in the event of a commercial power failure. This site serves five (5) connected premises in a twenty nine (29) square mile area. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Expected completion of this project is within the 2015 calendar year.

**2015 Update: Ongoing**

**2016 Update: This project was completed 4 QTR 2015.**

#### **SUNDANCE EXCHANGE - WYOMING**

#### **HIGHWAY 116 FIBER TO THE NODE CONSTRUCTION – H116**

The Sundance Highway 116 Project includes new placement of approximately 5 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. Current broadband speeds average 3Mbps downstream and 512Kbps upstream. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Highway 116 Electronic Serving Area Interface (ESAI) connects twelve (12) premises in an eighteen (18) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2015 calendar year.

**2015 Update: This project is in progress.**

**2016 Update: This project was completed 4 QTR 2015.**

### **Plan Year 2016**

#### **SUNDANCE EXCHANGE - WYOMING**

#### **CARLILE JUNCTION FIBER TO THE PREMISE CONSTRUCTION – CARJ**

~~The Carlile Junction FTTP project includes the new placement of approximately 19 route miles of fiber optic middle mile and access infrastructure. Current broadband speeds average 10Mbps downstream and 1Mbps upstream. The new FTTP access infrastructure will support broadband speeds averaging 50Mbps downstream and 20Mbps upstream. Direct buried cable~~

~~placement method is planned for this project. The Carlile Junction Electronic Serving Area Interface (ESAI) connects thirty eight (38) premises in a twenty six (26) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2016 calendar year.~~

**2015 Update:** This project was removed due to priority change.

## **Plan Year 2017**

### **ARVADA EXCHANGE - WYOMING:**

#### **WILD HORSE SOUTH FIBER TO THE NODE CONSTRUCTION - WLDH**

The Wild Horse South FTTN Project includes new placement of approximately 7 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. Current broadband speeds average 3Mbps downstream and 512Kbps upstream. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Wild Horse South Electronic Serving Area Interface (ESAI) will connect eleven (11) premises in a twenty four (24) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. **Expected completion of this project is within the 2017 calendar year.**

### **DECKER EXCHANGE - WYOMING**

#### **BEATTY GULCH FIBER TO THE NODE CONSTRUCTION - BTGL**

The Beatty Gulch FTTN Project includes new placement of approximately 3 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. Current broadband speeds average 1Mbps downstream and 128Kbps upstream. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Beatty Gulch Electronic Serving Area Interface (ESAI) will connect eleven (6) premises in an eighteen (18) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) 518-V loan design. Both the engineering and the construction of this project will be assigned to contract service providers. **Expected completion of this project is within the 2017 calendar year.**

### **SE SHERIDAN EXCHANGE - WYOMING**

#### **MURPHY GULCH FIBER TO THE NODE CONSTRUCTION - MRGL**

The Murphy Gulch FTTN Project includes new placement of approximately 7 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. Current broadband speeds average 1Mbps downstream and 256Kbps upstream. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Murphy Gulch Electronic Serving Area Interface (ESAI) will connect sixteen (16) premises in a twenty (20) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service

loan design. Both the engineering and the construction of this project will be assigned to contract service providers. **Expected completion of this project is within the 2017 calendar year.**

#### **SUNDANCE EXCHANGE - WYOMING**

#### **WARREN PEAK GENERATOR INSTALLATION - WRNP**

The project includes installation of a new emergency standby power generator to assure reliable delivery of mission critical voice and data services in the event of a commercial power failure. This site serves a Federal Aviation Administration (FAA) air traffic control peripheral and several wireless radio communications systems for both private and local government use. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Expected completion of this project is within the 2017 calendar year.

#### **SUNDANCE EXCHANGE - WYOMING**

#### **SUNDANCE MOUNTAIN GENERATOR INSTALLATION - SMTN**

The project includes installation of a new emergency standby power generator to assure reliable delivery of voice and data services in the event of a commercial power failure. This site serves several wireless voice and data communications and Internet service providers as well as wireless radio communications systems for both private and local government use. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. **Expected completion of this project is within the 2017 calendar year.**

#### **SUNDANCE EXCHANGE - WYOMING**

#### **SUNDANCE EAST GENERATOR INSTALLATION - SNDE**

The project includes installation of a new emergency standby power generator to assure reliable delivery of voice and data services in the event of a commercial power failure. The Sundance East Electronic Serving Area Interface (ESAI) connects nineteen (19) premises in a fourteen (14) square mile area. Anticipated funding for this project will be provided under the current Rural Utilities Service (RUS) 518-V loan design. Expected completion of this project is within the 2017 calendar year.

#### **SUNDANCE, WYOMING EXCHANGE**

#### **FROLANDERS FIBER TO THE NODE CONSTRUCTION - FROL**

The Frolanders FTTN Project includes new placement of approximately .5 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Frolanders Electronic Serving Area Interface (ESAI) will connect nineteen (19) premises in a fifteen (15) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2017 calendar year.

**2016 Update: Change in priority. Moved to 2017**

## **SUNDANCE, WYOMING EXCHANGE**

### **MILLER CREEK FIBER TO THE NODE CONSTRUCTION - MLCK**

The Miller Creek FTTN Project includes new placement of approximately 1.6 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Miller Creek Electronic Serving Area Interface (ESAI) will connect eleven (11) premises in a twelve (12) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2017 calendar year.

**2016 Update: Change in priority. Moved to 2017**

## **SUNDANCE EXCHANGE - WYOMING**

### **SUNDANCE FIBER TO THE PREMISE CONSTRUCTION PHASE 1 – SNDC1**

The Sundance FTTP project includes new placement of approximately 39.65 route miles of fiber optic infrastructure and electronics. The Sundance ESAI **connects three hundred fifty eight (358) premises in a twenty (2.5) square mile area.** When complete the ESAI will support broadband service speeds of 20MB downstream and 5MB upstream. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this phase 1 project is within the 2017 calendar year for construction and early 2018 for cutover.

## **Plan Year 2018**

### **SUNDANCE, WYOMING EXCHANGE**

### **MOSKEE SOUTH FIBER TO THE NODE CONSTRUCTION - MSKS**

The Moskee South FTTN Project includes new placement of approximately 4.5 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Moskee South Electronic Serving Area Interface (ESAI) will connect eight (8) premises in an eight (8) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service loan design. Both the engineering and the construction of this project will be assigned to contract service providers. **Expected completion of this project is within the 2018 calendar year.**

### **SUNDANCE, WYOMING EXCHANGE**

### **FROLANDERS FIBER TO THE NODE CONSTRUCTION - FROL**

~~The Frolanders FTTN Project includes new placement of approximately .5 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Frolanders~~

~~Electronic Serving Area Interface (ESAI) will connect nineteen (19) premises in a fifteen (15) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2018 calendar year.~~

**2016 Update: Change in priority. Moved to 2017**

#### **SUNDANCE, WYOMING EXCHANGE**

#### **MILLER CREEK FIBER TO THE NODE CONSTRUCTION - MLCK**

~~The Miller Creek FTTN Project includes new placement of approximately 1.6 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Miller Creek Electronic Serving Area Interface (ESAI) will connect eleven (11) premises in a twelve (12) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2018 calendar year.~~

**2016 Update: Change in priority. Moved to 2017**

#### **SUNDANCE, WYOMING EXCHANGE**

#### **SUNDANCE MOUNTAIN FIBER TO THE NODE CONSTRUCTION - SMTN**

The Sundance Mountain FTTN Project includes new placement of approximately 1.75 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Sundance Mountain Electronic Serving Area Interface (ESAI) will connect four (4) premises and several cell towers in a fifteen (15) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service loan design. Both the engineering and the construction of this project will be assigned to contract service providers. **Expected completion of this project is within the 2018 calendar year.**

#### **SUNDANCE, WYOMING EXCHANGE**

#### **UPTON SOUTH FIBER TO THE NODE CONSTRUCTION - UPNS**

The Upton South FTTN Project includes new placement of approximately 5 route miles of fiber optic infrastructure and new Broadband Loop Carrier (BLC) electronics. The new BLC electronics will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Upton South Electronic Serving Area Interface (ESAI) will connect seventeen (17) premises in a five (5) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service loan design. Both the engineering and the construction of this project will be assigned to contract service providers. **Expected completion of this project is within the 2018 calendar year.**

### **SUNDANCE EXCHANGE - WYOMING**

#### **SUNDANCE FOUR CORNERS FIBER TO THE PREMISE CONSTRUCTION - 4COR**

The Sundance - Four Corners FTTP project includes the new placement of approximately forty six (46) route miles of fiber optic middle mile and access infrastructure along with new electronics. The new FTTP access infrastructure will support broadband speeds averaging 50Mbps downstream and 20Mbps upstream. Direct buried cable placement method is planned for this project. This project will upgrade services to ninety two (92) connected premises in a thirty one (31) square mile area. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) loan design. Both the engineering and the construction of this project will be assigned to contract service providers. Expected completion of this project is within the 2018 calendar year.

**2015 Update:** This project was been removed due to priority change.

### **SUNDANCE EXCHANGE - WYOMING**

#### **SUNDANCE FIBER TO THE PREMISE CONSTRUCTION PHASE 2 – SNDCII**

The Sundance FTTP project includes new placement of approximately 39.65 route miles of fiber optic infrastructure and electronics. The Sundance ESAI connects three hundred fifty eight (358) premises in a twenty (2.5) square mile area. When complete the ESAI will support broadband service speeds of 20MB downstream and 5MB upstream. Anticipated funding for this project will be provided under a new Rural Utilities Service (RUS) loan design. Both the engineering and the construction of this project will be assigned to contract service providers. **Expected completion of this phase 2 project is within the 2018 calendar year for construction and cutover 2018 or early 2019.**

### **Plan Year 2019**

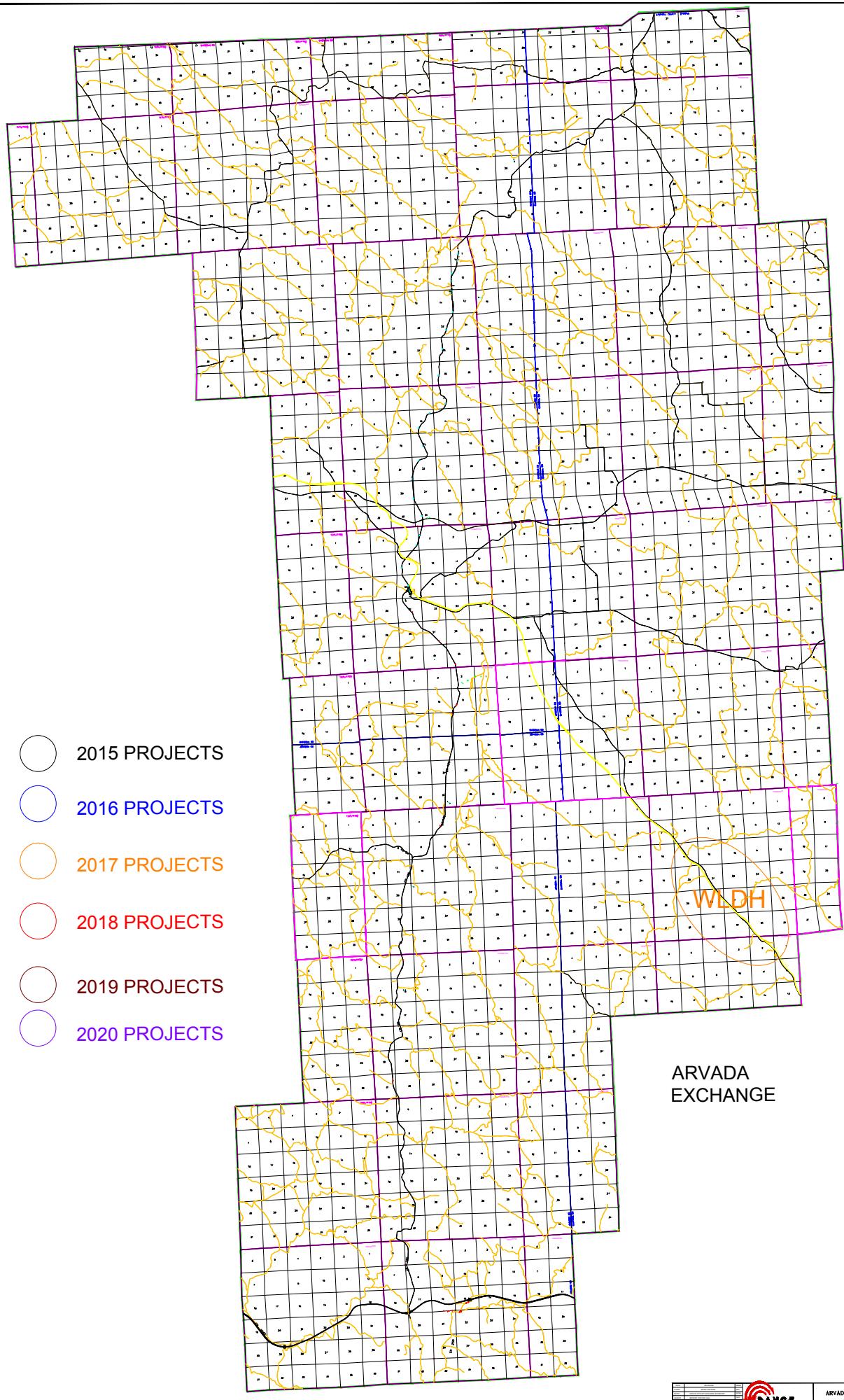
#### **DECKER EXCHANGE - WYOMING**

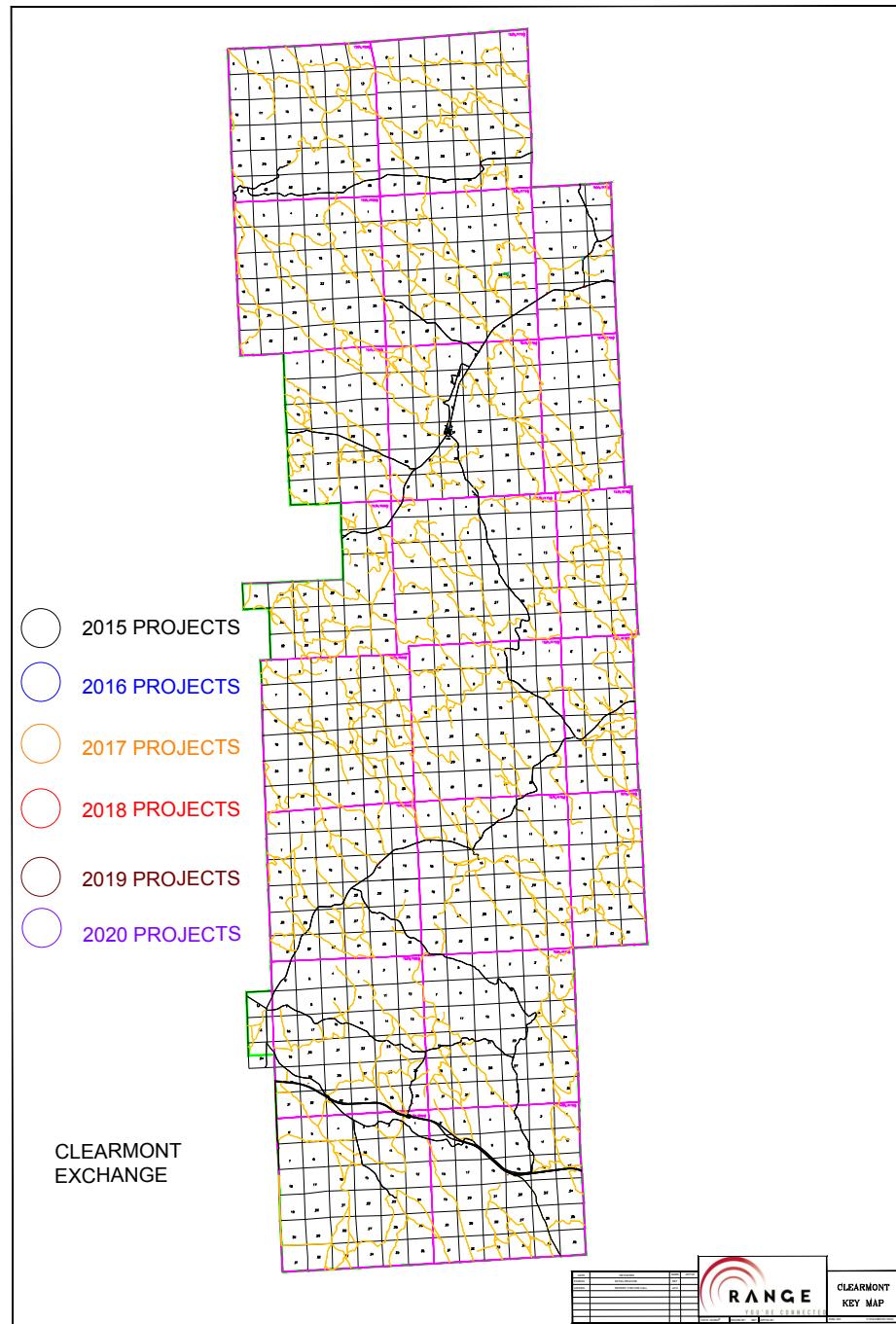
#### **DECKER TO YOUNGS CREEK FIBER TO THE NODE - YNCK**

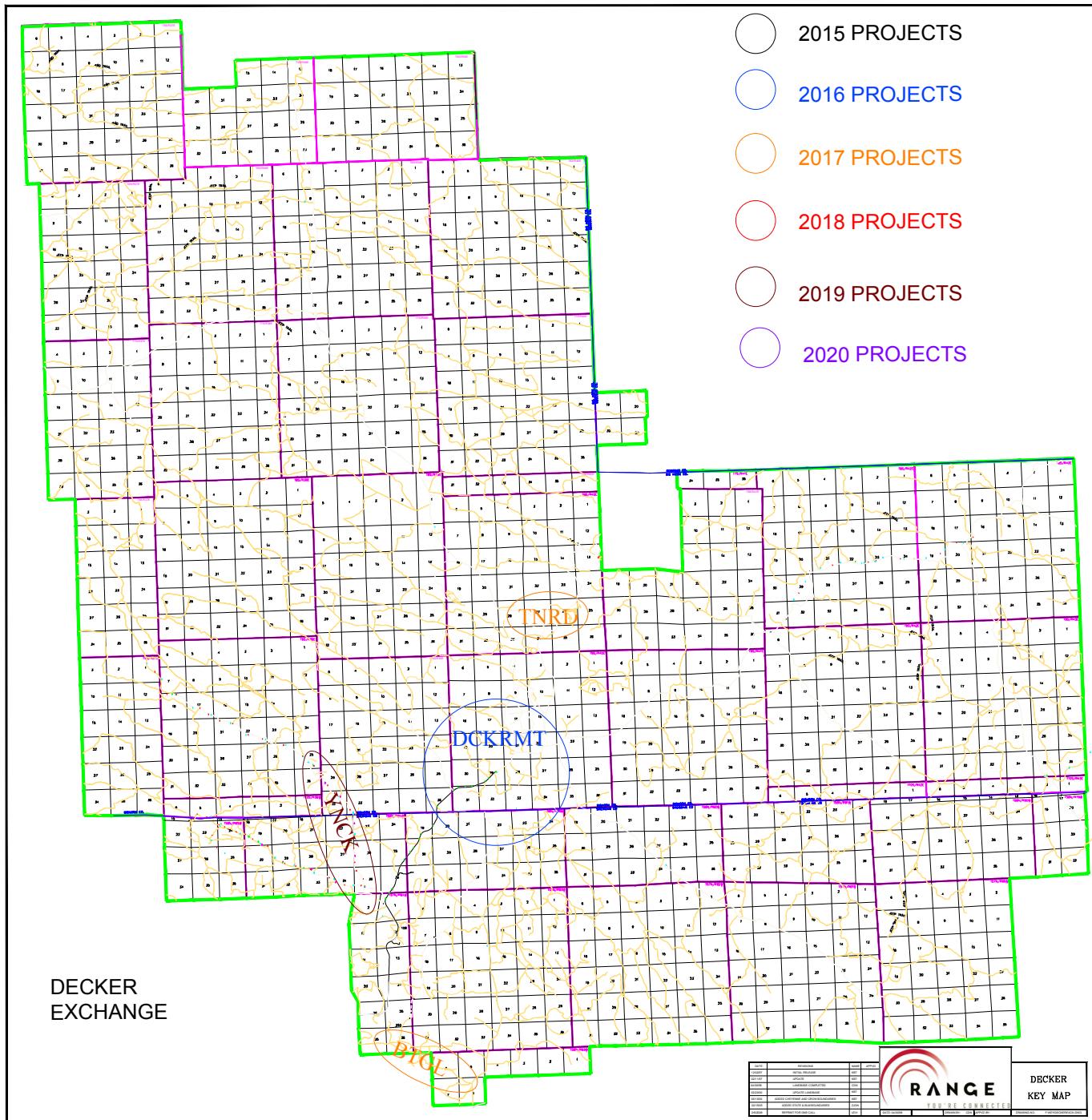
The Wyoming segment of the Youngs Creek FTTN Project includes new placement of approximately 3.5 route miles of fiber optic infrastructure in Wyoming to Broadband Loop Carrier (BLC) electronics located in Montana. This new infrastructure will replace copper T-Carrier span lines currently used to trunk Broadband Loop Carrier (BLC) facilities in this area. The FTTN node will support broadband speeds averaging 20Mbps downstream and 5Mbps upstream. Direct buried cable placement method is planned for this project. The Youngs Creek Electronic Serving Area Interface (ESAI) does not connect any Wyoming premises, but does four (4) premises in a twenty two (22) square mile area in Montana. Anticipated funding for this project will be provided under a new Rural Utilities Service loan design. Both the engineering and the construction of this project will be assigned to contract service providers. **Expected completion of this project is within the 2019 calendar year.**

### **Plan Year 2020**

### **Plan Year 2021**







## SE SHERIDAN EXCHANGE

- 2015 PROJECTS
- 2016 PROJECTS
- 2017 PROJECTS
- 2018 PROJECTS
- 2019 PROJECTS
- 2020 PROJECTS

